

**CITY OF RIVERSIDE**  
**HUMAN RESOURCES DEPARTMENT**  
**CLASSIFICATION SPECIFICATION**

08/01/2005

Revised

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**TITLE: SENIOR INSTRUMENT TECHNICIAN**

**DEFINITION**

Under general supervision, to supervise and participate in the performance of skilled electrical and electronic work in the maintenance, repair and calibration of automatic and manual metering, telemetering, control and alarm systems and equipment; and perform related work as required.

**DISTINGUISHING CHARACTERISTICS**

The Senior Instrument Technician class is the advanced level in the Instrument Technician series and works primarily in the field. This position is responsible for the most complex and specialized instrumentation repair and installation tasks. This position coordinates work schedules and provides training, guidance and supervision to the Instrument Technician and Plant and Equipment Electricians.

**REPORTS TO:** Wastewater Electrical Supervisor

**SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Wastewater Electrical Supervisor. Exercises close to general supervision over the Instrument Technicians and Plant and Equipment Electricians.

**EXAMPLES OF DUTIES**

Typical duties may include, but are not limited to, the following:

- Supervise and participate in troubleshooting problems in electrical and electronic systems; reading and interpreting blueprints, wiring diagrams and schematics; and utilizing a variety of test equipment.
- Supervise and participate in the testing, cleaning, repairing, rebuilding and calibrating metering and telemetering equipment.
- Supervise and participate in the testing, cleaning, repairing, calibrating and reprogramming of microprocessor and instrumentation systems and equipment.
- Supervise and participate in the maintenance, repair and balance of electronic systems for variable speed pump controls.
- Supervise and participate in the maintenance and repair of electrical and electronic operational control, recording and alarm systems and equipment.

**QUALIFICATIONS**

**Knowledge of:**

- Principles and practices of supervision and training, record keeping and parts and materials ordering and inventory.
- Practices, procedures, tools and equipment used in the installation, testing and repair of electronic systems, meters, telemetering and instrumentation equipment, microprocessors and related items.

- Principles of electronic circuitry systems, meter, telemetering, instrumentation, microprocessors and similar equipment.
- Occupational hazards and safety precautions necessary in the work.

**Ability to:**

- Supervise and train subordinates.
- Work independently and make decisions relative to work methods.
- Troubleshoot, locate, correct and repair defects in instrumentation and electronic control equipment.
- Operate a variety of electronic diagnostic equipment.
- Understand and carry out oral and written instructions.
- Work overtime as required.

**Education and Experience:**

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to the completion of the twelfth grade supplemented by completion of a certificate program in electronics.

Experience: Three years of experience in electrical or electronic instrumentation system installation, maintenance and repair, preferably involving water or wastewater plant treatment processes.

**MEDICAL CATEGORY:** Group 2

**NECESSARY SPECIAL REQUIREMENT**

Possession of an appropriate, valid class "C" California Motor Vehicle Operator's License.

**CAREER ADVANCEMENT OPPORTUNITIES**

**FROM:** Senior Instrument Technician

**TO:** Wastewater Electrical Supervisor